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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,912	03/16/2004	Urs Ammon	16680	3076
4859 7590 02/22/2007 MACMILLAN SOBANSKI & TODD, LLC ONE MARITIME PLAZA FIFTH FLOOR 720 WATER STREET TOLEDO, OH 43604-1619			EXAMINER COLON SANTANA, EDUARDO	
			ART UNIT 2837	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
3 MONTHS			02/22/2007	
			DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/801,912	Applicant(s) AMMON ET AL.	
	Examiner Eduardo Colon Santana	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/01/04; 2/28/05</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Detail Action</u> . |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 6/01/2004 and 2/28/2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "said reference current value" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hakala et al. U.S. Patent No. 6,367,587.

Referring to claim 1, Hakala discloses an elevator drive machine including multiple electric motors and a traction sheave as claim (see all figures and respective portions of the specification). Hakala further depicts from figure 2, a pair of space apart end plates (frames 3, 44) each retaining an associated bearing (22); a pair of electric motors having rotor (17, 18) and stator (19, 20); a shaft (39) see dotted line in figure 3, having opposed free ends, and being rotatably supported by bearings (22), each free end of the shaft being drivingly connected to an associated one of the motors. Furthermore, Hakala discloses a traction sheave (2) supported by the shaft for rotation by the motors (see figure 2, 5 and 6).

As to claim 2, Hakala depicts in figures 2 and 3, rotors (17, 18) arranged on the associated free end of the shaft and a stator (19, 20) mounted on an associated bearing end plate by a cage housing.

Referring to claim 3, Hakala et al. discloses at least one brake disk not label see figure 4 attached to the traction sheave (2) and at

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least one disk brake (9) acting on at least one brake disk (see Col. 4, lines 20-22).

As to claim 8, Hakala et al. discloses a secondary sheave (47) attached to the machine frame by a support (46) (see figure 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 4-7 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hakala et al. in view of Albrich et al. U.S. Patent No. 6,429,554.

Referring to claims 4 and 9, Hakala et al. addresses all the similar limitations of claim 1 above, but does not explicitly describes having a drive unit with a plurality of frequency converters connected to the motors and operating in a master/slave mode. However,

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Albrich et al. discloses an system in which an electric motor is used cableway drives or lift systems in which a plurality of frequency converters are connected to the motor and operating in a master/slave (see claim 1). Additionally, Albrich discloses in figure 1, frequency converters (5a-5f).

Since Hakala et al. and Albrich et al. are in the same field of endeavor regarding lift systems, the purpose disclosed by Albrich would have been recognized in the pertinent art of Hakala et al.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have a plurality of frequency converters connected to each motors and operating in a master/slave mode as taught by Albrich within the teaching of Hakala et al. for the purpose/advantages that in the event of failure of one or more stator segments in the motor (i.e. winding short circuit or failures in the associated frequency converter) the electric motor can continue to run generally without additional measures, or in the worst case scenario, the other motor will continue to operate.

As to claims 5, 10 and 13, Albrich depicts from figure 1, a control portion (6a) of the master frequency converter (5a) that obviously specifies a total current distributed among the frequency converters (5b-5f), wherein each of the slave frequency converters (5b-5f) obviously include a current regulator for regulating a current based upon a reference current value and an actual current value detected by the current detection device (9a).

Referring to claims 6 and 11, Albrich depicts from figure 1, a bus system connecting frequency converters (5a-5f) for communicating at least one of reference-current, synchronization signals and identification signals from the main control device (11).

As to claim 12, Albrich et al. discloses resolver line (15), representing an actual rotational speed of a motor shaft by a tachogenerator (not shown) coupled to the shaft and a the control portion (6a) generating a signal representing a reference rotational speed (see figure 1 and Col. 3, lines 31-41).

As to claim 14, Hakala et al. discloses a secondary sheave (47) attached to the machine frame by a support (46) (see figure 5).

Conclusion

6. The prior art made of record in form 892 and not specifically relied upon is considered pertinent to applicant's disclosure to further show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Colon Santana whose telephone number is (571) 272-2060. The examiner can normally be reached on Monday thru Thursday 6:30am - 5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 X.37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eduardo Colon Santana
Examiner
Art Unit 2837

ECS
February 12, 2007



LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER